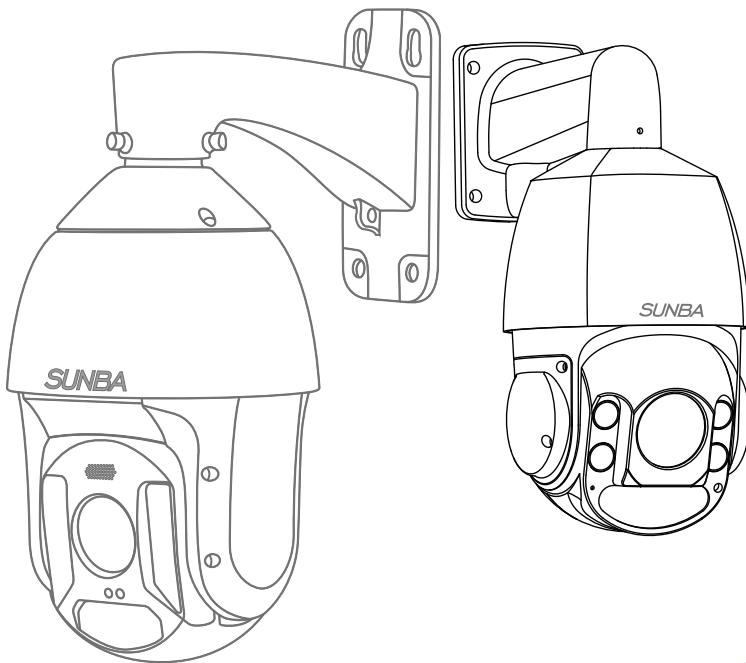


SUNBA® Lite Series

Network PTZ Camera

Premium Engineering. Durable Outdoor Surveillance
Ideal for House or Project Site

User Guide V11.0



2023/05
Version 11.0



Visit <http://lite.sunbatech.com> to access the step by step YouTube video tutorials for setting up Sunba IP PTZ camera.

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FCC Warning (U.S.A)

The device has been tested in compliance with limits set by Part 15 of Federal Communication Commission (Class B). The operation of the device is thus limited by the following two conditions:

1) it is not permitted to cause harmful interference to any authorized radio communications, and 2) it must accept any interference it receives.



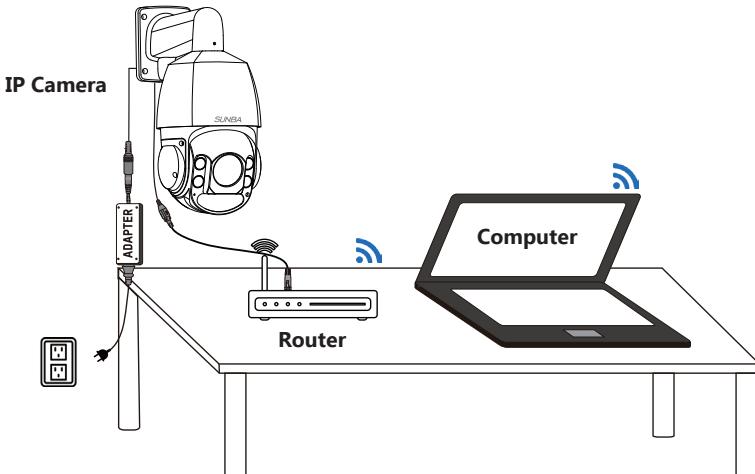
WARNING: Please test the camera indoor before mounting it outside. Stay at least 24 hours to test both daytime and night vision IR LED.

1. Camera Bench Test



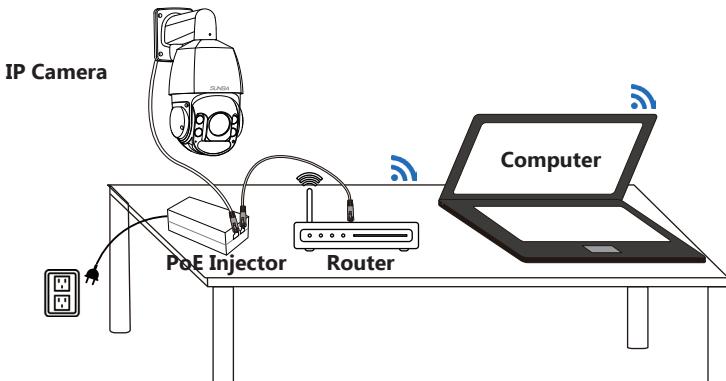
When you take the camera out of the box, please test the camera indoor first before mounting outside.

Type A: With DC12V Adapter (non-PoE)



Do NOT extend the power cable during the bench test because DC power drops quickly along the transmission. A bench test helps you rule out all problems caused by power supply. Underpower causes problems such as 1) PTZ issues 2) unstable infrared (camera reboots repeatedly) and 3) spinning dome.

Type B: With PoE Injector/Switch



PoE Standard

It is important to note that all Sunba pan tilt zoom cameras require to be powered by PoE+/++ adapters (injector/switch) with 802.3at/bt standard. Conventional PoE standard 802.3af delivers only 15.4W per port and using those adapters would cause underpower.

Power Gauge (PD)	PoE Standard	Support DC12V Adapter?
≥25W	802.3at/bt	Yes

Note: 802.3at is also known as PoE+; 802.3bt is known as PoE++.

What are you testing in this stage?

1. Does the camera rotate when powered up?

When powered up, the speed dome automatically begins a self-diagnostic process during which the camera will pan horizontally and vertically to make sure PTZ, lens and other parts of the camera are functional. Please contact our technical staff if a self-test does not happen on your unit. Please refrain from disassembling the unit before contacting us.

2. Live View and Picture Quality

Check the video streaming quality.

3. Pan Tilt and Zoom

Check whether the camera performs the pan, tilt, zoom actions properly.

4. Night Vision

Shield the camera front lens, turn off the lights and draw the curtains to see if the camera is able to automatically turn to infrared night vision mode.



- ✓ Connection Good
- ✓ Power Good
- ✓ Video and Control Good
- ✓ Tested Day and Night

Guess we are ready to mount it outside.

Questions? Ask support@sunba.net

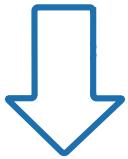
2. Camera Setup by Smartphone

This section will provide the user with information on how to setup the PTZ camera using smartphone for the first time.

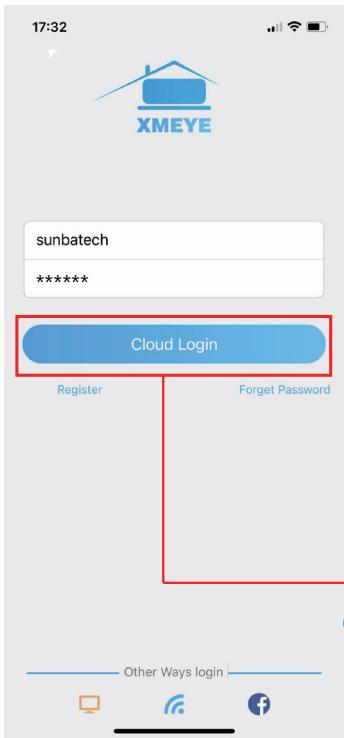
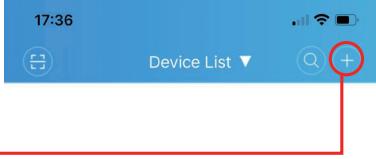
The diagram illustrates the setup process for XMEye. It starts with a 'video tutorial' link to smartphone.sunba.net, which is connected to a QR code for Android. A large blue arrow points down to the 'APP Download' section, which includes a smartphone icon and a QR code for iOS. The 'APP Download' section is also connected to the XMEye logo and text. Below this, there are two screenshots: the XMEye mobile app login screen (Android) and the XMEye mobile app device list screen (iOS). A red line with a circle highlights the '+' icon on the iOS device list screen, with the text '② Click the "+" icon to add device.' A red line with a circle also highlights the 'Cloud Login' button on the Android login screen, with the text '① Register to select "Cloud Login" (push notification requires a cloud account to store picture alert.)'. A dashed box contains the note: 'NOTE: iSunba/iSunba Pro/XMEye These APPs are suitable for Sunba Lite Series cameras.'

[video tutorial smartphone.sunba.net](http://smartphone.sunba.net)

 XMEye

Android  iOS

② Click the "+" icon to add device.

① Register to select "Cloud Login" (push notification requires a cloud account to store picture alert.)

NOTE: iSunba/iSunba Pro/XMEye
These APPs are suitable for
Sunba Lite Series cameras.



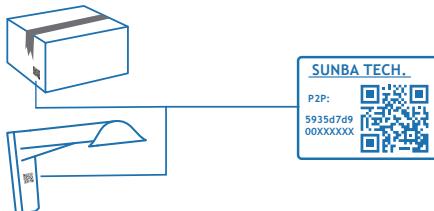
Device Name

Serial Number

Advanced DDNS

③

Remote or with 4G: manually scan or enter the camera QR code to add device.



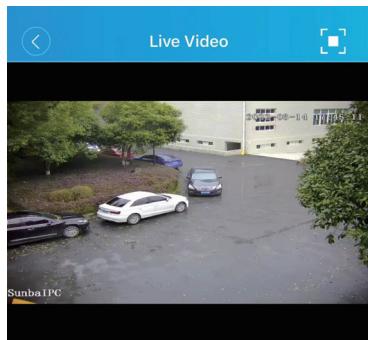
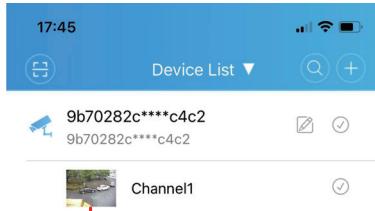
OK

Search

Forgot your device password?

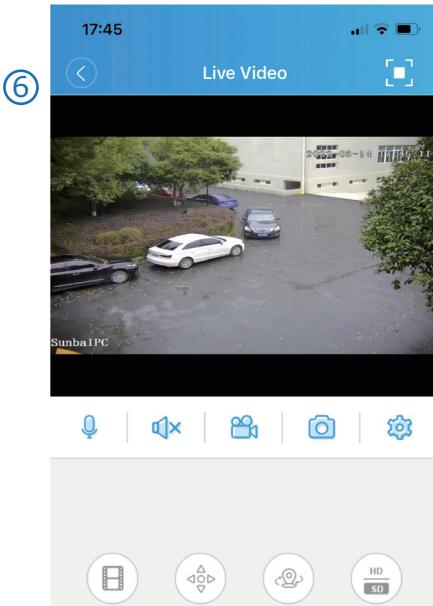
The app automatically shows all Sunba devices in LAN.

Use "Search" if your camera and smartphone are connected to the same WiFi.



④ Press the camera to watch live view.

⑤ Modify other settings such as password for the camera.



Control pan, tilt and zoom, watch live view and set/delete/call presets from this page.

- Press to speak. (device must support speaker)
- Turn on/off microphone.
- Record a video and save the clip to your smartphone.
- Take a snapshot and save the image to your smartphone.
- Check playback.
- PTZ control.
- Switch between HD/SD display.
- Set/call preset/cruise.

3. Camera Setup by VMS Client

This section will provide the user with information on how to setup the PTZ camera using their computer.

Step 1: Install VMS from the CD-ROM or Download from sunbatech.com

Input the default **software account** below. The account is to ensure no one can have unauthorized access to your surveillance software. This is not the credential for individual IP camera.

VMS for PC: admin/admin

VMS for Mac: admin/(blank)

Step 2: Open the Device Manager page.

Click "**IPV4 Search**" and select the camera, then click "**add**" to connect the device.

Try the following if no device shows up:

- Temporarily disable the firewall;
- Connect the camera directly to your parental router;
- Connect the camera directly to your PC/Mac for testing;
- Contact support@sunba.net

Online Devices: 8

<input type="checkbox"/>	Name	CloudID	IP/Port	Protocol	Group
<input type="checkbox"/>	192.168.1.208	1d8a34814c36c3c9	192.168.1.208:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.240	c1829c11de8f8e9	192.168.1.240:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.242	Not Available	192.168.1.242:8000	Onvif	Default Group
<input type="checkbox"/>	192.168.1.245	Not Available	192.168.1.245:80	Onvif	Default Group
<input type="checkbox"/>	192.168.1.249	Not Available	192.168.1.249:8000	Onvif	Default Group
<input type="checkbox"/>	192.168.1.250	4e2d7baa37ede662	192.168.1.250:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.27	4e2d7baa37ede662	192.168.1.27:34567	XM	Default Group

IPV4 Search IPV6 Search Add Cloud Add

All Devices: 0 Online: 0

<input type="checkbox"/>	Name	CloudID	IP/Port	Version	Group	Connect	Pswd Status	Record Status	Connections	Operation
--------------------------	------	---------	---------	---------	-------	---------	-------------	---------------	-------------	-----------

If you checked this function, VMS will automatically modify the IP address of your camera to adapt to the same gateway as your PC. If you do not need VMS to automatically modify the camera IP, please uncheck this function.

In order to login device,modify ip automatically

Manual Add Add Group Remove BackUp Import

Now the camera status should show "**Connected**".

Online Devices: 7

<input type="checkbox"/>	Name	CloudID	IP/Port	Protocol	Group
<input type="checkbox"/>	192.168.1.240	c1829c11de8f8e9	192.168.1.240:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.242	Not Available	192.168.1.242:8000	Onvif	Default Group
<input type="checkbox"/>	192.168.1.245	Not Available	192.168.1.245:80	Onvif	Default Group
<input type="checkbox"/>	192.168.1.249	Not Available	192.168.1.249:8000	Onvif	Default Group
<input type="checkbox"/>	192.168.1.250	4e2d7baa37ede662	192.168.1.250:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.27	4e2d7baa37ede662	192.168.1.27:34567	XM	Default Group
<input type="checkbox"/>	192.168.1.191	Not Available	192.168.1.191:80	Onvif	Default Group

IPV4 Search IPV6 Search Add Cloud Add

All Devices: 1 Online: 1

<input type="checkbox"/>	Name	CloudID	IP/Port	Version	Group	Connect	Pswd Status	Record Status	Connections	Operation		
<input type="checkbox"/>	192.168.1.208	1d8a34814c36c3c9	192.168.1.208:34...	V5.00.R02.L5330747.10010.349f17.00...	Default Gr...	Connected			0			

In order to login device,modify ip automatically

Manual Add Add Group Remove BackUp Import

“Connected” status indicates the camera is online.

Tricks:

The camera's default ports are ONVIF 8899, TCP 34567, HTTP 80 and RTSP 554. Those values must also be unique to each other.

Step 3: Live View

Please go to the "Live View" page.



4. WiFi Application

 This chapter only applies to WiFi Version (405-ECO WiFi/ 405-D25X WiFi etc)

This section will provide the user with information on how to setup the WiFi connection.

video tutorial wifiset.sunbatech.com



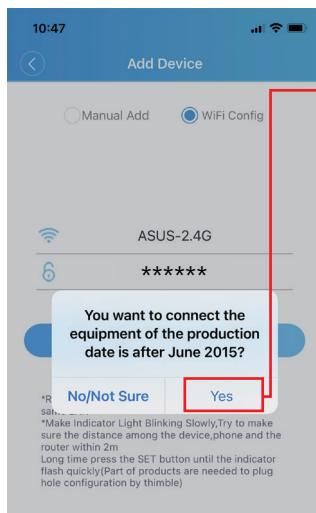
Method A: Search and add the camera by smartphone.

After the camera is powered on and completes the self-test, you can directly search and add the camera via XMEye APP on smartphone.

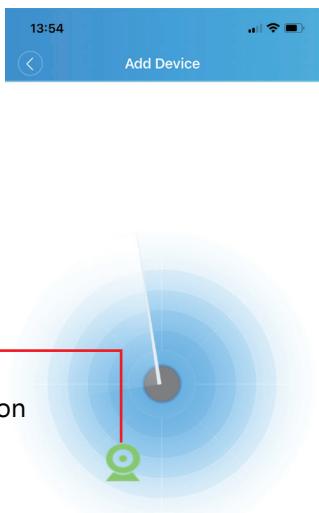
Attention: Make sure the distance among the camera, phone and the router within 2meter.



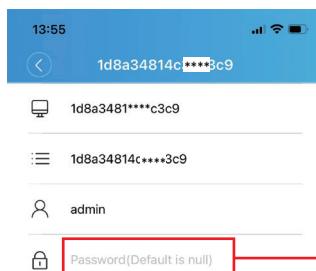
Attention: Make sure your phone is in **2.4GHz WiFi** network, and 5GHz or other network is not supported.



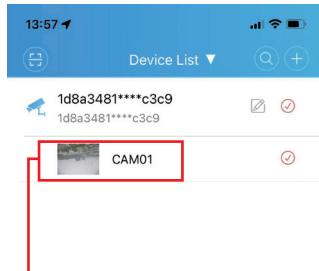
④Click Yes



⑤Device searching.
Click the green IPC icon



⑥Enter password.

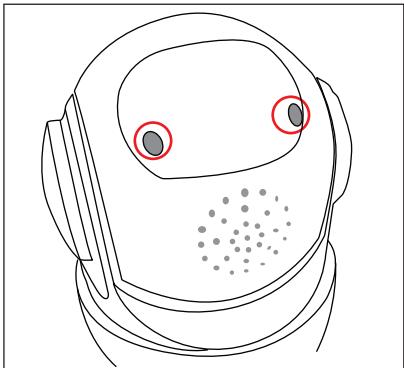


⑦Click and start live view.

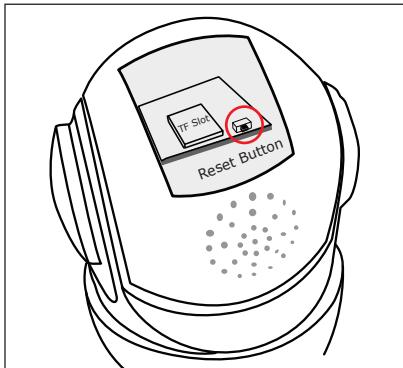
Tips:

If the search fails, please refer to the following two ways to default the camera, and then refer to the above steps to search again.

1. Please manually press the button to default the camera as shown below

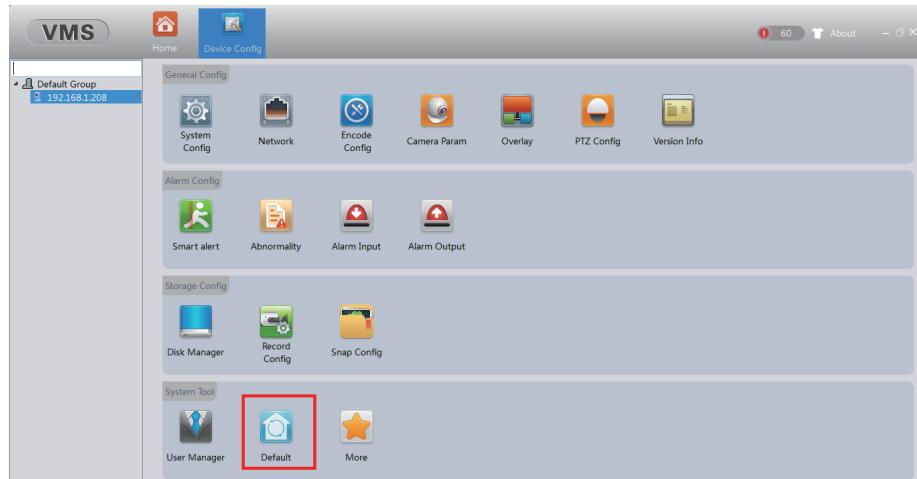


Remove the 2 screws to take off the camera TF slot cover.



Press and hold the black button for about 8~10 seconds.

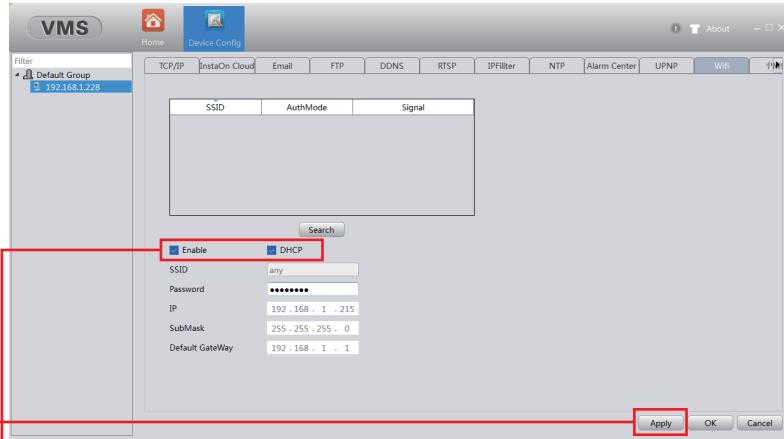
2. You can directly connect the camera with a PC or laptop, and default the camera via VMS/IE browser.



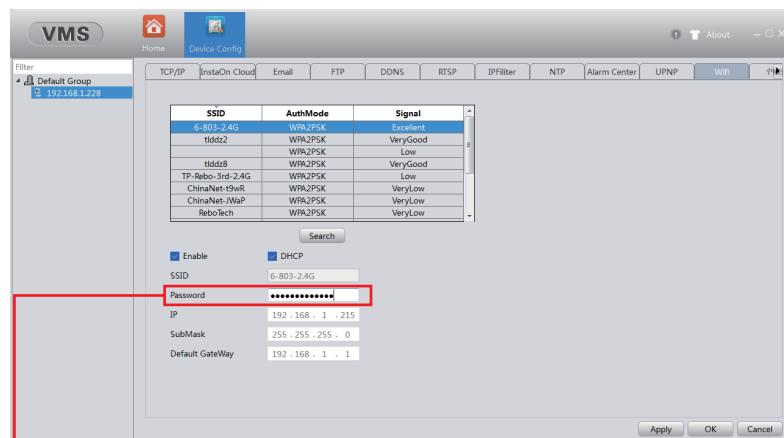
Method B: Enable WiFi function via VMS/IE browser.

Please refer to Chapter 3 and Chapter 6 for the steps to access the camera through the VMS/IE browser.

After adding the camera, please go to Device Config > Network > WiFi (In Internet Explorer, please go to Device Config > NetService > WiFi)



- ① Click Enable and enable DHCP.
- ② Click Apply to save the settings.
- ③ Click Search to select a WiFi with stable and strong signal.



- ④ Fill in the correct WiFi password.
- ⑤ Click Apply and OK to save the settings.

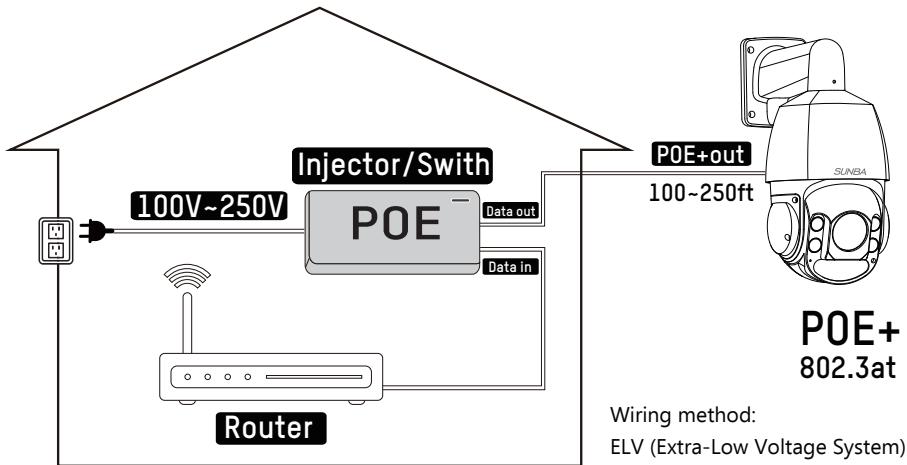
Attention: After checking Enable in the first step, you must click Apply to save the settings, otherwise the WiFi signal will not be searched.

5. Mounting Outdoor

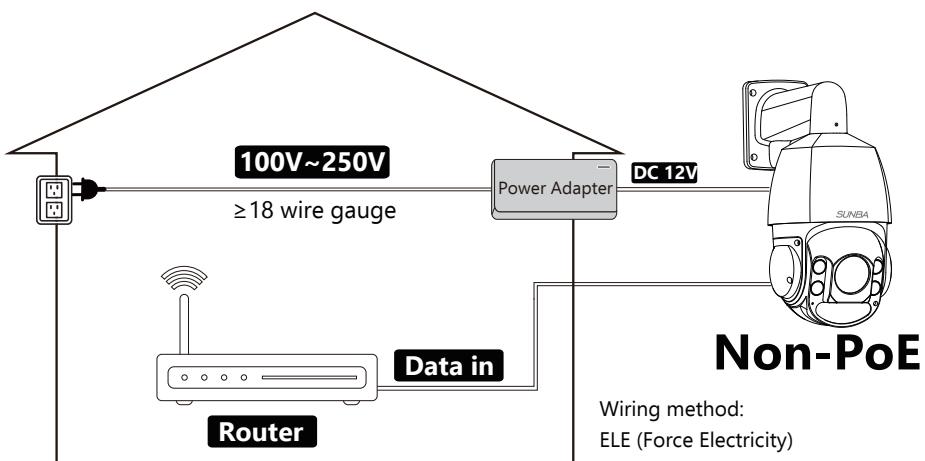


Please complete bench test (see Chapter 1) before mounting the camera outdoor.

Wiring Type A: Power of Ethernet Solution



Wiring Type B: Non-PoE (DC12V) Solution



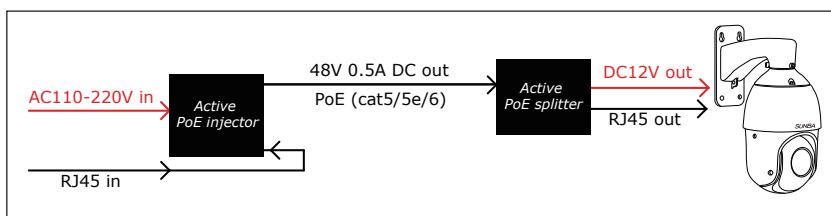
For Non-PoE Application (if you extend the power):

The camera may not work properly if the power reaches the camera is below 12V due to resistance along the extended DC line (distance dependent). If that happens, please make your AC power source near the camera, and connect it with our default adapter you received from the package.

For extension, you can select from AC power extension cable (no distance limit) or thick (\geq 18 AWG) DC power extension cable.

Risk Relevant

- 1.Using 24VAC or higher voltage adapter (16V, 24V) will immediately damage the camera and void the warranty.
- 2.The camera will be exposed to high risks of motherboard damage and void the warranty if you use passive PoE injector/splitter.



Active PoE Injector/Splitter are allowed if you use PoE to power non-PoE camera.

6. Web Access

Step 1: Check Device IP from VMS or Device Manager tool

Users can download VMS or Device Manager from the CD-ROM. Both software will display the current IP of the camera.

NO.	IP Address	Port	Desribe	Mac Address	CloudID
<input type="checkbox"/> 1	192.168.1.12	34567		00:00:11:06:83:24	dff25d48157925
<input type="checkbox"/> 2	192.168.1.70	34567		00:12:17:58:e3:b9	c369f2750087b2

Check device IP address

IP Address: 192.168.1.12
Subnet Mask: 255.255.255.0
Gateway: 192.168.1.1
SameToPc
HTTP Port: 80
TCP Port: 34567
Mac Address: 00:00:11:06:83:24
CloudID: dff25d48157925
adminPsw
Modify
Advance

SelectAll IP Search Add Device WebBrowse Reboot ResetConfig

DirPath: Browse Export
FileName: Browse Upgrade



You can always download the web plugin separately from Sunba website if it takes too long to download the plugin from popped window.

Step 2: Start a web browser (Internet Explorer)

Enter the IP address of your camera in the location/host field.

If you have changed the default http port (80) of the camera, you need to enter IP: *http port*.

Note: Our cameras currently do not support Windows 11 Edge Explorer. You can follow the tips below to enable Internet Explorer mode in edge browser.

Step 3: Install the web plugin

Download and install the web plugin by clicking the "download" tab or by installing the WebPlugin from the CD-ROM. Please make sure the browser is CLOSED during the installation. If you are unable to download the plugin or if your software disc is damaged during transit, please visit plugin.sunba.net to download the plugin. Restart the browser/computer if the installation does not take effect in 5 mins.

Step 4: Select Language

You can change the language from the upper right corner. Changes only take effect after you successfully install the plugin, otherwise the text will show "?????" or disappear.



Step 5. Enter Username and Password

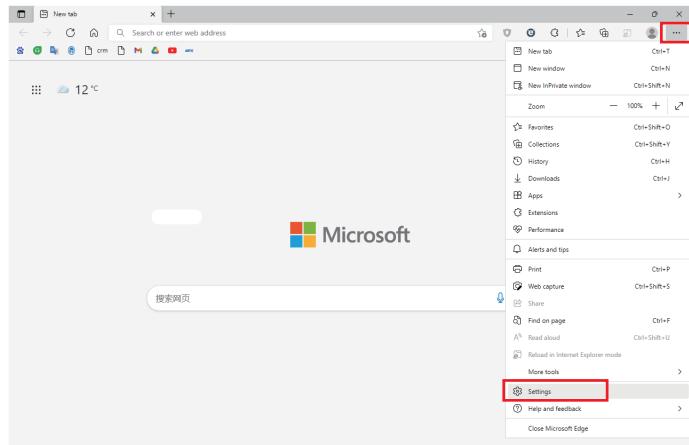
Enter username and password. The username is admin with no password by default. Please **change the admin password** after log in to protect your privacy by referring to Chapter 14.

Step 6. Select Stream

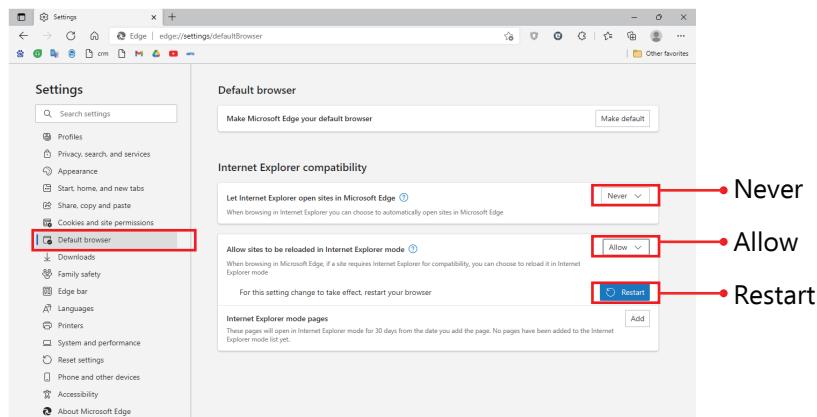
Go to <stream menu> and connect with either main stream (clear, better quality, higher network requirements) or extra stream (fluent, lower network requirements).

Tips: Steps to Enable Internet Explorer Mode in Edge Browser on Windows 10/11

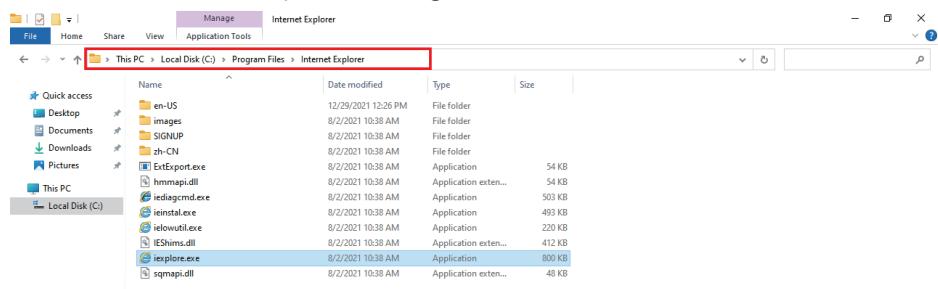
1. Open Edge Browser and click ..., then click Settings



2. Select Default browser and then select according to the following figure:



3. Search for Internet Explorer in Program Files



7. Assign a static IP

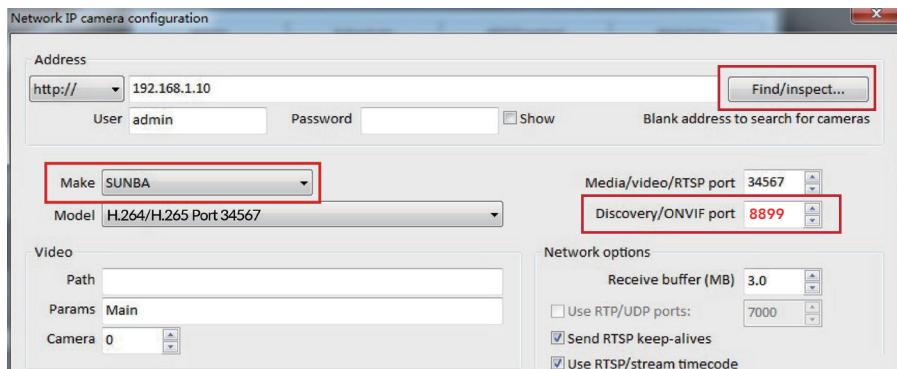
Step 1: Enter Device Config Page of Internet Explorer or VMS, and select the Network tab.

Step 2: Unselect the DHCP option.

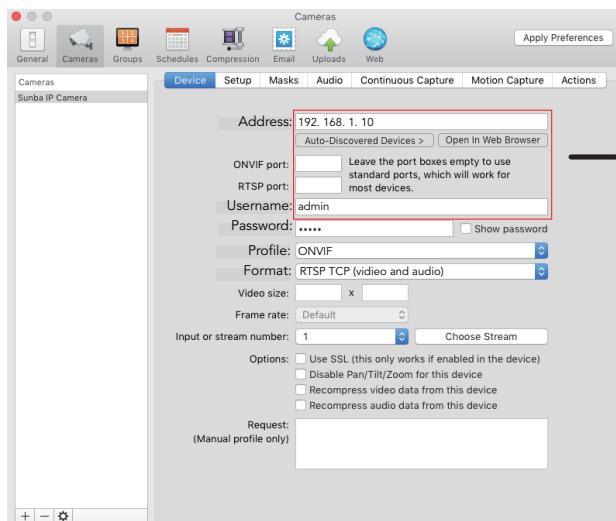
Step 3: Change the camera IP and click "Apply" to save the changes. Power cycle the unit to activate the new setting.

8. Access by 3rd Party Software

This chapter introduces how to add the camera to a selected few popular 3rd party software.



Blue Iris (in Windows)



Security Spy (in Mac)

Other third party IP camera management tools

There are many other IP camera management tools you can use. Above we attached the setting from the most popular software in Windows and Mac. Some software/NVR requires manually adding the camera with the camera's ONVIF protocol and the ONVIF port 8899.

Note : In 3rd party software/NVR, due to the level of customization for ONVIF by different surveillance manufacturers, only ptz, video and recording may work depending on specific ONVIF version.

If you have particular 3rd party software that you would want to use with Sunba PTZ cameras, we are happy to supply resources and assistance we can offer to integrate our protocol. Please contact us via support@sunba.net.

9. Remote Access

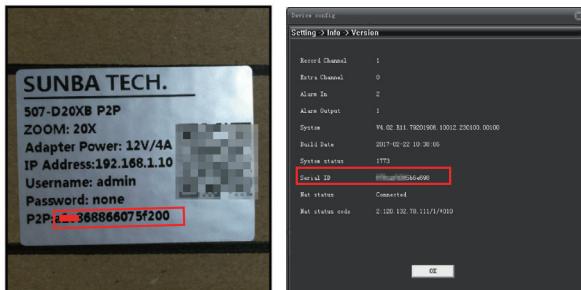
Type 1: Sunba Cloud (P2P)

P2P cloud technology enables customers to remotely access, control and configure their cameras through internet even if you are thousands miles away.

Warning: P2P function may not work if you modify the default media port (34567) of the camera or the DNS of your camera is not on the same subnet as your router. Your NAT status by DeviceConfig->Version needs to be "connected" before you are able to access your camera through P2P.

1) Find Your Sunba Cloud ID:

Note P2P Code = Cloud ID = Serial Number



Tips: 
Go to Sunba website FAQ page and type keyword "mobile" to gain the setup page for popular smartphone app such as XMEye, TinyCam Pro, IP Cam Viewer.

2) Enter the Cloud ID in Sunba Cloud Platform for remote access:

Internet Explorer:

Please go to xmeye.net and use "**Device Login**". Enter the cloud ID of the camera and associated username and password.

The image shows two side-by-side screenshots. On the left is the 'Add Device' interface of the Sunba VMS. It has fields for 'Device Name' (Sunba), 'Group' (Default Group), 'Login Type' (CloudID), 'CloudID' (987dc021338*****), 'UserName' (admin), 'Password' (empty), 'Vendor' (SUNBA), and buttons for 'Save And Continue', 'OK', and 'Cancel'. On the right is the 'xmeye.net (Internet Explorer)' login page. It has tabs for 'By User' and 'By Device' (which is selected). It shows a user entry for '987dc021338*****' and a password entry for 'admin'. Below these are 'Verify' and 'Login and Preview' buttons. A handwritten note 'y7au' is written over the 'Verify' button.

Type 2: Port Forwarding



Please refer to portforward.sunba.net for more instructions.

Please forward BOTH http port (80 by default) and TCP (media) port (34567 by default) and refer to the manual of your router for detailed steps of port forward in order to remotely access using a WAN IP. Other apps such as Tiny Cam or IP Cam Viewer may require you to forward ONVIF and RTSP port as well.

Disclaimer: Though it is a popular method, Sunba does not recommend setting up port forwarding as it opens all ports to the public network and increases chances of information leak.

Type 3: RTSP

Please use the following URL along with any 3rd RTSP service provider:
rtsp://IP:554/user=admin&password=&channel=1&stream=0.sdp?real_stream where 0 = mainstream and 1 = substream

For example with the default network setting:

rtsp://192.168.1.10:554/user=admin&password=&channel=1&stream=0.sdp?real_stream

Type 4: VPN (Virtual Private Network)

This is recommended for customers who have static IP address and advanced router functions.

First, your router MUST support VPN. Then please refer to the corresponding manual of your router to establish a VPN for the local network where the camera is connected to. For example, the VPN was setup for the router at your home where the camera is installed. Please remember the username and password of the VPN. Then, at any remote location, you can always setup a new network using VPN to remotely access your camera at home.

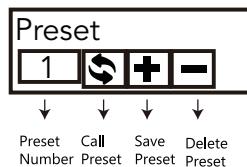
10. Presets, Patrol and Pattern

Note: For other software please refer to the manual of the third party software.

Enter the number and hit "+" to set/add/save a

Enter the number and hit "-" to delete a preset.

Enter the number and hit "S" to call a preset.



PTZ Preset Position

Sunba dome cameras can set preset PTZ positions for which cameras can memorize and travel directly by calling the preset. Preset positions are represented by numbers. You need to "add" a preset and then "call" it. You can always "delete" them later.

Special Presets



Check Special Preset via specialpreset.sunba.net

Special presets are preset numbers associated with advanced commands that cameras can follow to modify/enable settings such as changing infrared mode, setting up camera auto scan boundaries etc. You can call the preset directly (no need to "add" a preset as they are pre-existed) according to **The Full Preset List**.

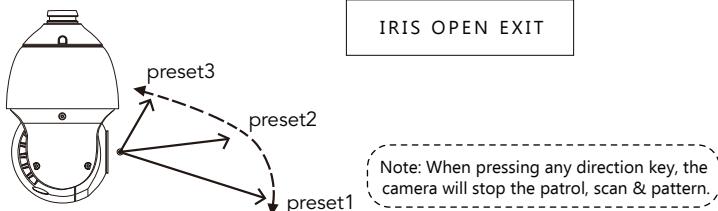
Patrol

The PTZ camera can travel from one preset to another by order. A patrol is usually named as a tour or a cruise. The total presets included in a patrol can be up to 10. To activate a patrol, first you will need to save corresponding presets you want to tour across. For example, preset 1-10 can be called by using special preset 88 (see The Full Preset List).

Pattern

Different from patrol, which enables the camera to travel between different points, patterns are continuous sets of movement that Sunba cameras can perform in a record and replay fashion. Note: Patterns will not be activated unless Motion Detection and Video Blind are disabled.

When using 84 + Add Preset to set a pattern scan, you must use direction & zoom key to set the actions and click Iris+ key to end the pattern setup, prompt as follows:



11. The Full Preset List

Special Preset	Function	OSD Display
0~50 Preset	Conventional Position Preset	
XXX + Add Preset	Set preset XXX.	PRESET IS SAVED XX
XXX + CALL	Call preset XXX.	PRESET XX
81 + CALL	Reset the PT position	CALIBRATE
47 or 81 + Add Preset	Set the left boundary of frame scan	LEFT BOUNDARY
48 or 82 + Add Preset	Set the right boundary of frame scan	RIGHT BOUNDARY
82 + CALL	Start frame scan (auto scan from left side to the right side)	L&R SCAN
83 + CALL	Clear all preset	CLEAR PRESET
84 + Add Preset	Set pattern followed by different action inputs; confirm by clicking "IRIS+" button	START PATTERN,SET PATTERN XX; COMPLETE
84 + CALL	Start pattern	START PATTERN
85 + CALL	Patrol from 1 to 40 preset	START PATROLS
88 + CALL	Patrol from 1 to 10 preset	START PATROL1
89 + CALL	Patrol from 11 to 20 preset	START PATROL2
90 + CALL	Patrol from 21 to 30 preset	START PATROL3
91 + CALL	Patrol from 31 to 40 preset	START PATROL4
92 + CALL	Default	DEFAULT
93 + CALL	Display preset information	
94 + CALL	Hide preset information	
98 + CALL	360° continuous scan	360
100 + CALL	Manually turn IR on (half side on)	IR ON
101+ CALL	Manually turn IR off	IR OFF
102+ CALL	Set the IR mode to auto (default)	IR AUTO
103 + CALL	Manually turn IR on (all side on)	IR ALL ON
120 + CALL	Display current bright level	BRIGHT XX
97 + 131 + CALL	IR on sensitivity 190	IR ON 190
97 + 132 + CALL	IR on sensitivity 200	IR ON 200
97 + 133 + CALL	IR on sensitivity 210	IR ON 210
97 + 134 + CALL	IR on sensitivity 220	IR ON 220
97 + 135 + CALL	IR on sensitivity 230	IR ON 230
97 + 136 + CALL	IR off sensitivity 165	IR OFF 165
97 + 137 + CALL	IR off sensitivity 175	IR OFF 175
97 + 138 + CALL	IR off sensitivity 185	IR OFF 185
97 + 139+ CALL	IR off sensitivity 195	IR OFF 195
97 + 140 + CALL	IR off sensitivity 205	IR OFF 205
97 + 180 + CALL	Set the Park Action to None	PA NONE
97 + 181 + CALL	Set the Park Action to 360° continuous scan	PA 360
97 + 182 + CALL	Set the Park Action to frame scan (auto scan from left side to the right side)	PA L&R SCAN
97 + 183 + CALL	Set the Park Action to preset 1	PA PRESET1
97 + 184 + CALL	Set the Park Action to preset 8	PA PRESET8
97 + 185 + CALL	Set the Park Action to patrol 1	PA PATROL1
97 + 186 + CALL	Set the Park Action to patrol 2	PA PATROL2
97 + 187 + CALL	Set the Park Action to patrol 3	PA PATROL3
97 + 188 + CALL	Set the Park Action to patrol 4	PA PATROL4
97 + 189 + CALL	Set the Park Action to pattern	PA PATTERN
97 + 190 + CALL	Set the Park Action to patrol 5	PA PATROL5

Special Preset	Function	OSD Display
97 + 160 + CALL; 97 + 161 + CALL; 97 + 169 + CALL	Set the Park Action Start Time to 15s; Set the Park Action Start Time to 16s; Set the Park Action Start Time to 24s;	PA DWELL TIME 15 PA DWELL TIME 16 PA DWELL TIME 24
97 + 170 + CALL; 97 + 171 + CALL; 97 + 179 + CALL	Set the Park Action Start Time to 30s; Set the Park Action Start Time to 35s; (5 second added per preset increment) Set the Park Action Start Time to 75s;	PA DWELL TIME 30 PA DWELL TIME 35 PA DWELL TIME 75
97 + 200 + CALL; 97 + 201 + CALL; 97 + 215 + CALL	Set the Patrol Dwell Time to 10s; Set the Patrol Dwell Time to 15s; (5 second added per preset increment) Set the Patrol Dwell Time to 85s;	PATROL D TIME 10 PATROL D TIME 15 PATROL D TIME 85
97 + 225 + CALL; 97 + 226 + CALL; 97 + 229 + CALL	Set the Frame Scan Speed to 5; Set the Frame Scan Speed to 10; (5 speed added per preset increment) Set the Frame Scan Speed to 25;	SCAN SPEED 1 SCAN SPEED 2 SCAN SPEED 5

IR MODE AUTO:

Turn on/off IR LED automatically according to darkness of ambient environment. If the value of the CURRENT LEVEL (darkness) is \geq the IR ON SENS, then the LED will be turned on automatically, vice versa. **Larger CURRENT LEVEL is equivalent to darker environment.** AUTO MODE is selected by default.

IR MODE MANUAL:

Turn on and off the IR LED manually. This can be accomplished using special presets 100~103 as well. Please check specialpreset.sunba.net

IR ON SENS

The adjustable darkness threshold to turn on the IR LED, default is 210.

IR OFF SENS

The adjustable darkness threshold to turn off the IR LED, default is 185.

PATTERNS

This option has the same function as 84 + Add PRESET. To set up a pattern, you must use direction & zoom key to add actions and Iris+ key to end the setting. Each pattern scan can memorize no more than 31 actions.

Note: If you open the video motion & video blind function the pattern scan will be disabled .

PARK ACT

This option is also called the watch function or the defend function of a PTZ camera. The dome will automatically execute a corresponding preset action after a settled idle time (25 seconds is default) if no additional commands are sent from users.

PARK TIME

The waiting time (or idle time) before the camera executes its PARK ACTION (see above). The default is 25 seconds.

SET FRAME SCAN

Set the right and left position of frame scan. Submenu as follows:

This function enables the auto scan of the camera between a set left and right boundary. It can be set using PRESET 81+Add & PRESET 82+Add as well. When setting up the frame scan, direction keys are used to set the position of the boundary. Thus, please click the Iris+ key to confirm your setting.

FRAME SPEED

It controls the speed when the dome does the 360° scan or frame scan. (For model 507-D20X 4K only 355°)

DWELL TIME

It represents the residence time the dome stops at each preset during the patrol/auto scan.

12. Camera Configuration



HDD Info:

The information of the storage device (TF card).

LOG:

Access the events, alarm and activity record of camera.

Version:

Check the serial number of the camera, and the build date of the firmware.

Reboot:

Restart the camera.

Upgrade:

Upgrade the firmware of the camera. You need to download the upgrade file ("bin" format) first.

Image Storage: Take timed snapshot and store it to Email, FTP or TF Card (if supported).

Record:

Set camera recording plan and mode. The "manual" and "stop" selection allows you to manually turn on and off, and the "timing" allows you to set the schedule where recording takes place.



Video Motion:

Enable motion detection alert formats (buzzer, email, recording, snapshot & FTP etc), region, and sensitivity. Set motion detection video recording time.

Video Blind:

Set an alarm when the vision of the camera is covered (usually by house breakers using clothes).

Video Loss:

Set an alarm when a video loss happens.

Alarm Input:

External connection linkage alarms such as infrared sensor etc (not built-in by camera, need additional support in qualified NVR).

Alarm Output:

Alarm output can be an external lights, siren, etc. (not built-in by camera, need additional support in qualified NVR).

Abnormal:

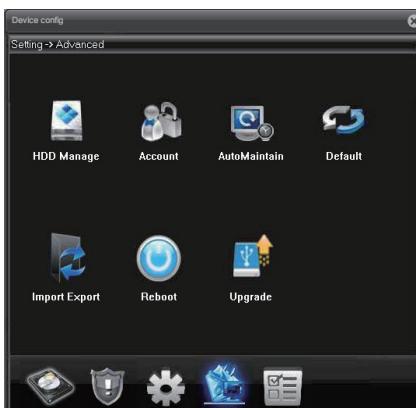
Set an alarm for special events such as storage device access failure or IP conflict with other devices.

How to Access the Device Config:

For IE: Click "DeviceCfg"

For VMS: Choose Device Config

(PS: You must add the camera via Sunba protocol, not ONVIF)



General:

Change system language and date.

Encode:

Change resolution, bit rate and other factors that affect video quality and connectivity. Enable/Disable audio.

Network:

Configure the camera's IP address, gateway, DNS etc.

NetService:

Configure NTP, email alert, WiFi and other services.

GUI Display:

Customize camera name, time title and other display setting.

Camera Parameter:

Configure camera parameter such as exposure level, wide dynamic range, shutter speed, image direction (flip, mirror) etc.

HDD Manage:

Manage the storage device (TF card).

Account: Add, delete and change account info (username/password) and their authority level.

AutoMaintain:

Set the automatic reboot plan and empty the cache of the camera.

Default:

Set the current camera configuration info to the default.

ImportExport:

Import/Export the configuration and log of the camera.

13. Account Management

Warning: Camera accounts are NOT the same as VMS software account.

When you open VMS, a prompt will ask you to enter password for accessing the VMS program. This account is set to prevent unauthorized use of the VMS software on your desktop.



← Account for VMS Software
NOT for Camera

Camera accounts can only be managed by its native clients. Third party software will not be able to modify any accounts information as it doesn't have access to the camera's private protocol.

VMS: Device Config->Tool Manager->User Manager

CMS/IE: Device Config-> Account

Group and User Permission:

You can set a group that shares the same level of permission for camera control and view. For example, you can set several users to a "guest" group that has limited control over the camera.

Allow Multiple Access :

Please remember to check the "sharable" or "reusable" option when adding a user if you wish to have the same user account accessed by multiple people.



To protect your account safety, please always remember to modify your default password!

14. Motion Detection

Human Detection:

Human-shape detection will filter out other motion objects and have the camera only trigger motion alarms when human-shapes are detected.

Buzzer:

Must have a siren connected with the alarm interface of the NVR to enable this option.

Send Email:

Enable this and enter your email information via Device Config->NetService (Network in VMS). You can also enable the snapshot option to activate email alert with snapshots.

Write Log:

A log will be popped on the screen every time an alert is received.

FTP: See Chapter 16.

Phone Report:

Enable this option, register an account in the XMeye app of your smartphone (or via xmeye.net) and activate push notification to receive text alerts.

15. Face Capture

The face capture feature is only supported by specific models (For details, you can contact us via support@sunba.net), and needs to be coupled with the Sunba NVR model F8009SE/F8010SE to be able to capture, store and browse snapshots of human faces. Firmware upgrade might be required to realize this feature. For detailed steps of setup, please refer to the user manual of Sunba NVR.

16. FTP Communication

You can upload motion detection snapshots and videos to your FTP.

Step 1: Please remember to check the "Detect" option in the Snapshot Config or Record Config under Device Config.

Step 2: VMS: Device Config-> Network->FTP

CMS/Browsers: Device Config->NetService->FTP

Week	All days	General	Detect	Alarm
TimeSection1	00:00	23:59	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TimeSection2	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>
TimeSection3	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>
TimeSection4	00:00	23:59	<input type="checkbox"/>	<input type="checkbox"/>

Motion Detect
Camera Masking
Video Loss

Enable

Sensitivity

Period

Interval Seconds

AlarmOut Enable Seconds

Record Enable Seconds

Snapshot Enable Seconds

PTZ Activation

Send Email

Buzzer

Step 3: Enable the motion detection (in Video Detect or Video Motion). See Chapter 15. Then enable the FTP option.

Snapshots: You must also enable snapshot in Video Detect.

Videos: You must also enable record in Video Detect and have a storage media in order to upload the videos to FTP. Like many other network cameras, you will need to have a TF card (install inside the camera's built-in memory slot) or a NVR as a forwarding transfer station to your FTP. This is required because without storage media, the camera does not have enough RAM to hold large video files before it establishes a connection with your FTP.

17. Reset the Camera

Option 1: Reset the camera parameter and configuration(IE/VMS/CMS)

Device Config → Default

Option 2: Reset the camera parameter and configuration

Press the button inside the camera manually.

(The back cover needs to be removed and keep the camera power on)

Option 3: Reset camera network setting including ports and IP address

Device Manager → Reset Config

Option 4: Reset/modify camera network setting after lock-up (time out/login error)

Download the third party tool called ONVIF Device Manager

Option 5: Reset the password

You can reset the password if you've set up and remembered the security questions for your device in Device Config->Account->Safe Questions.

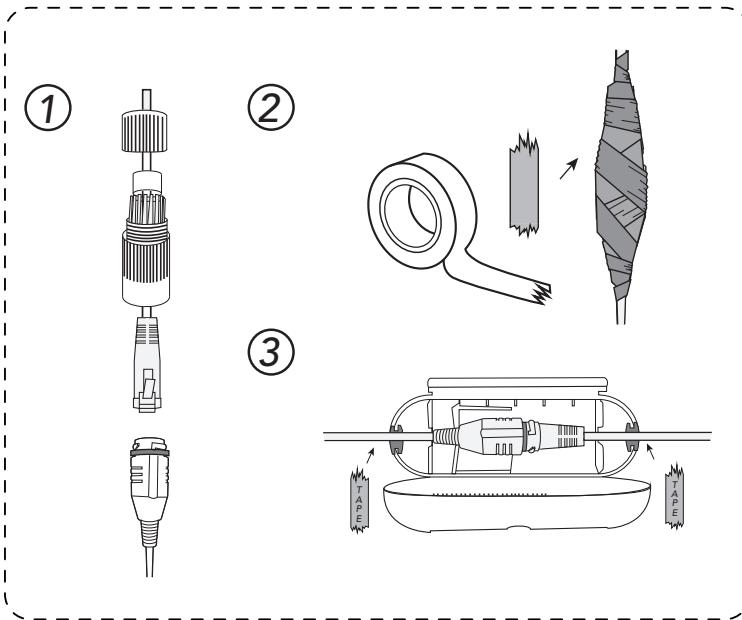
Option 6: Reset Tool (Factory Reset)

Please go to <http://reset.sunba.net> to download the reset tool and send the safety code to Sunba Support Team (support@sunba.net) to retrieve a reset code. The reset code is exclusive for each individual safety code.

18. Cable Waterproof Measures

The camera itself is IP 66 Waterproof Rating. However, the cable connectors may still have exposures to water under different applications. It is always recommended for users to take precautions to protect the cable connectors of the camera.

Below are 3 popular methods:



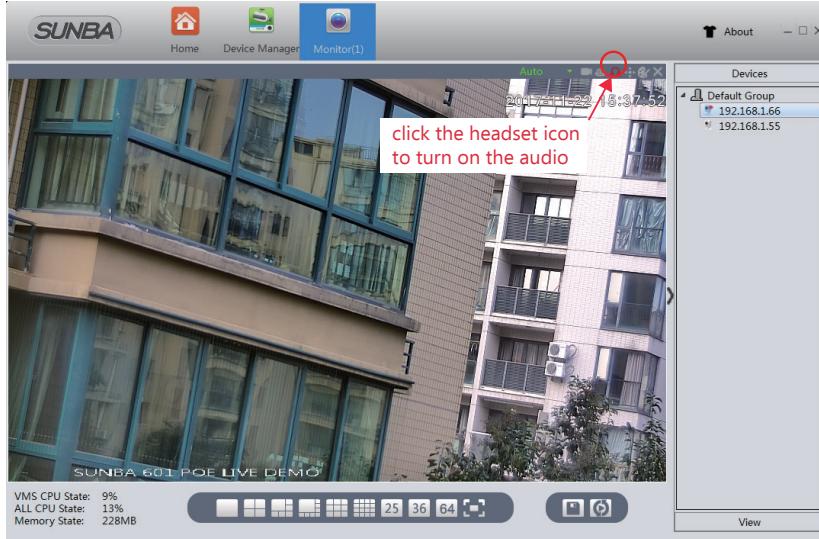
1. Certain models have waterproof ethernet kit shipped together with the camera. To apply the waterproof kit, you have to cut the crystal head, thread the ethernet cable through the waterproof kit, and then finally use crimper tool to add the crystal head back to the cable.
2. Using electrical waterproof tape is one of the most popular ways of protecting connectors from water exposure.
3. Using waterproof connector protector together with some electrical waterproof tapes can be another option.

19. Audio Setting

Note: The camera has **built-in microphone** with sound pick-up capacity. There is no need to install additional microphone on this model.

Setup: how to enable the audio at camera after installation?

Please remember to check the audio option in "Device Config->Encode->video/audio->Enable it "



Warranty Statement

1. This product comes with a 2-year limited warranty in USA (1 year in other regions) and covering parts only. You must pay the labor fee for repair inside the warehouse. However, any parts replacements are always covered and we will be sending you videos & paper instructions on how to fix the unit. Please contact us first within the warranty period to make sure the condition of warranty is met.

2. Our warranty does not extend to any products that are physically damaged or are not under normal operating conditions as a result of misuse or improper installation on the user's end.

Sunba's Return Policy

Return Window

Please return your product within 30 days of your receipt. That's the official deadline the return request must be received. Exception applies for items in resellable conditions.

RMA

We will provide a Returned Merchandise Authorization (RMA) Number for each item that satisfies the return request. Please put your RMA sheet inside the box for reference to expedite the refund process. All products must be returned within 14 days from the RMA issuing date.

Complete Package Rule

Please return the product with its original packaging, including manuals, brackets and toolkit that come with the unit for a full refund. According to Amazon's restocking fee policy, returns with incomplete/materially different package may enable sellers to charge a restocking fee up to 20% subject to the completeness of the package. Therefore, please make sure you keep the package in good condition in the period of valid return window to avoid any additional charge.

Refund

If you didn't receive an automatic refund within 10 days of the receipt of your return, it is either the RMA was not attached to the package or the RMA was lost by the warehouse. In this case, please kindly provide us with your tracking number so that we can match the return package and the refund will be manually processed within 24 hours. Please watch your email notifications.

For any questions, don't hesitate to reach support@sunba.net
SUNBA® Technology



FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.